



Making Conservation Work for You

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for
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Topics

- ❑ Demand Profile and Programmatic Decisions
- ❑ Price
- ❑ Conservation = \$avings

Conservation

- ⌚ Results from
 - Behavior
 - Efficient Equipment
- ⌚ Utility and customer cooperation

Public

- ✓ Support is essential
- ✓ Expects leadership from utility
- ✓ Can be an ally or a partner
- ✓ Can drive new program development

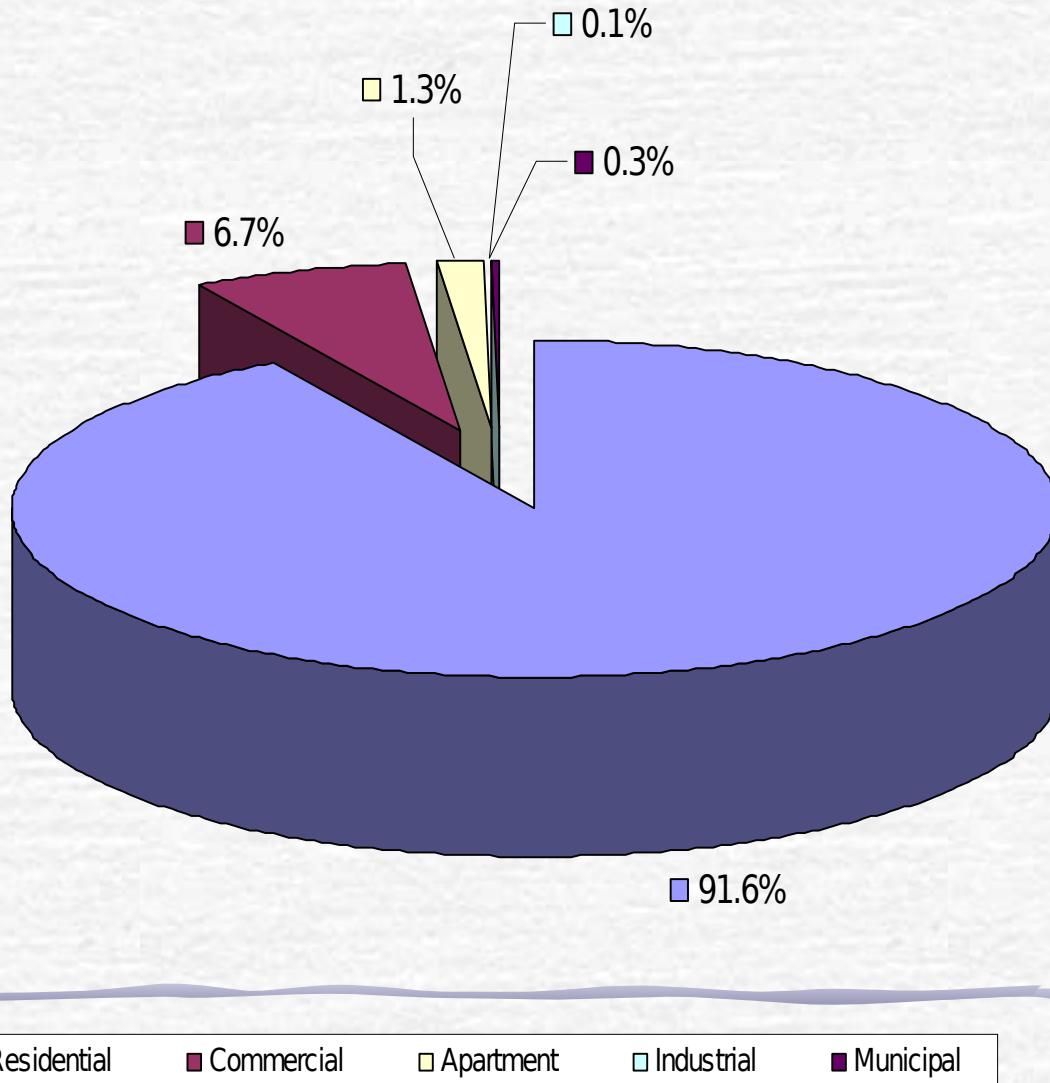
Conservation Goals

- ☛ Percent reduction
- ☛ Per Capita reduction
- ☛ Cost/Benefit

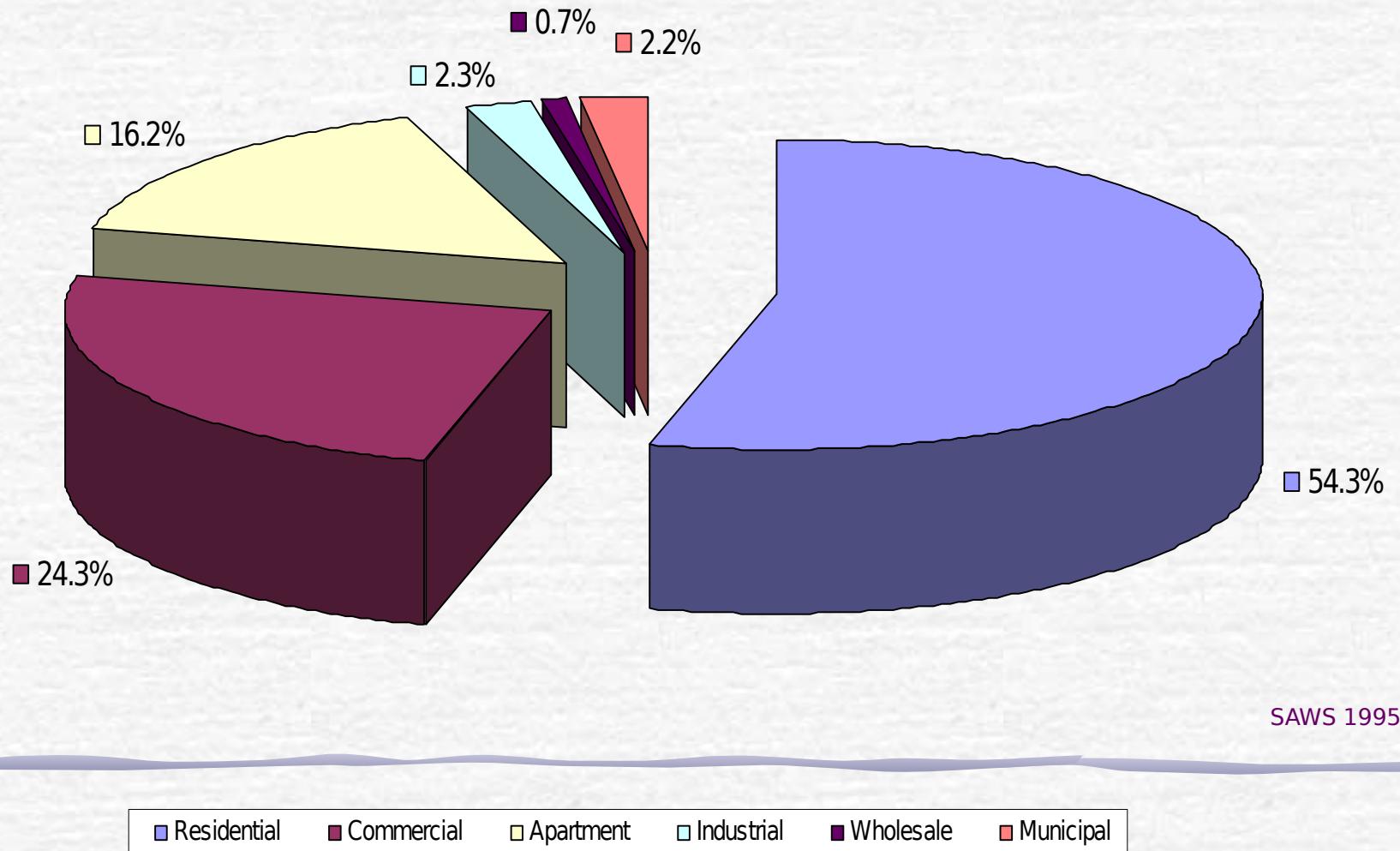
Demand Profile

- ⌚ Lost or un-metered water
- ⌚ Customer classes
- ⌚ Summertime peaking
- ⌚ Growth projections

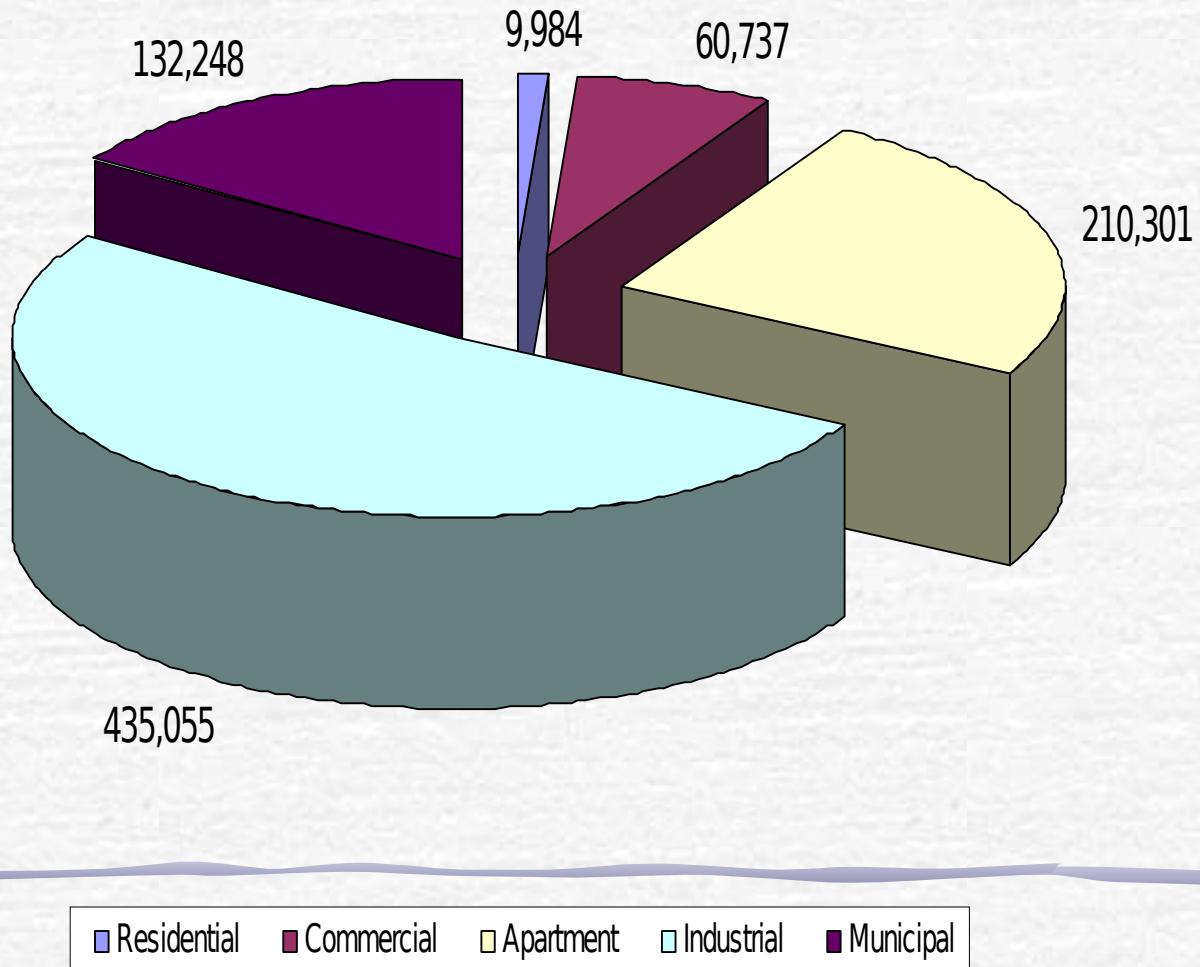
Connections by Customer Class



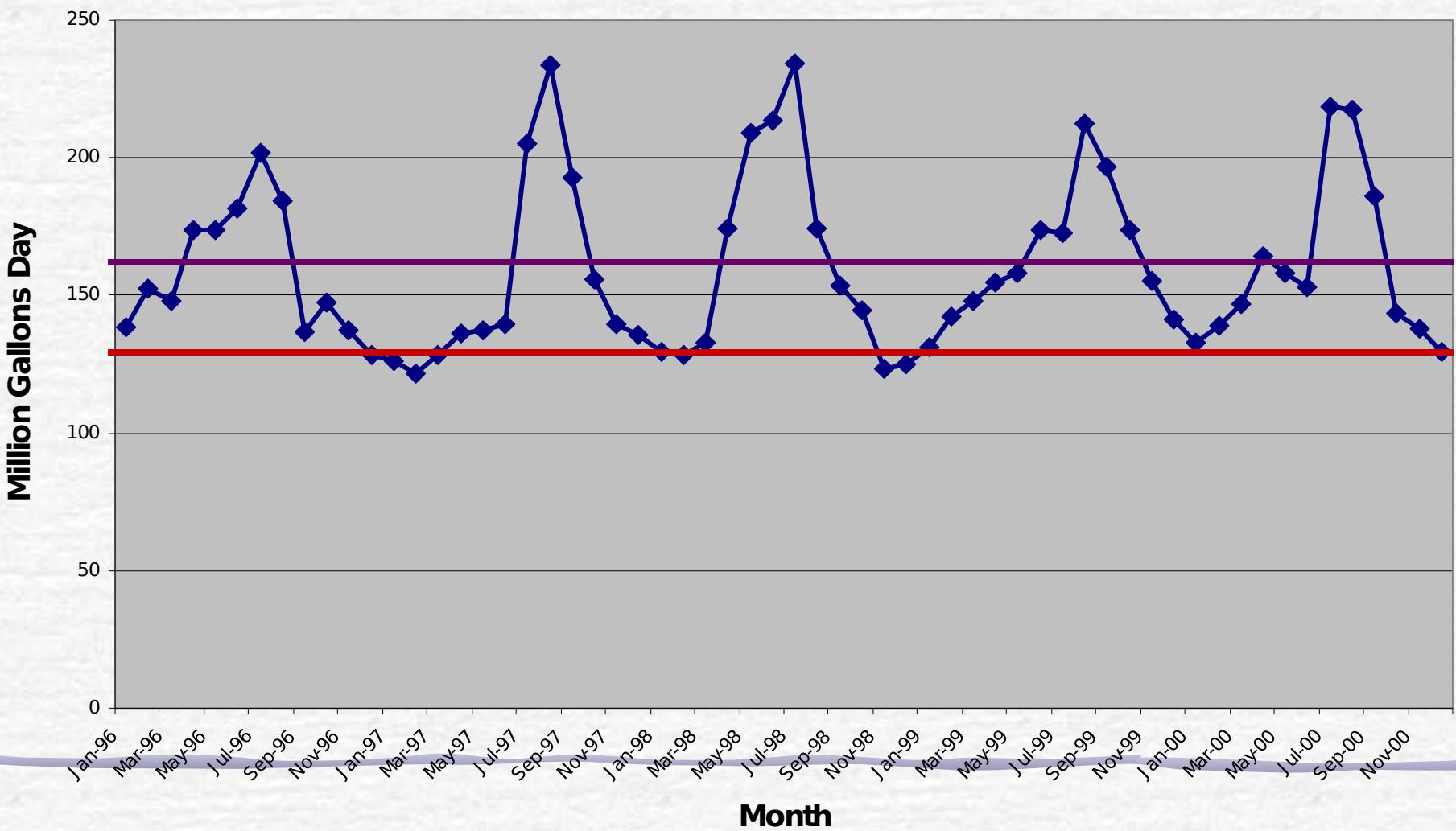
Water Consumption by Customer Class



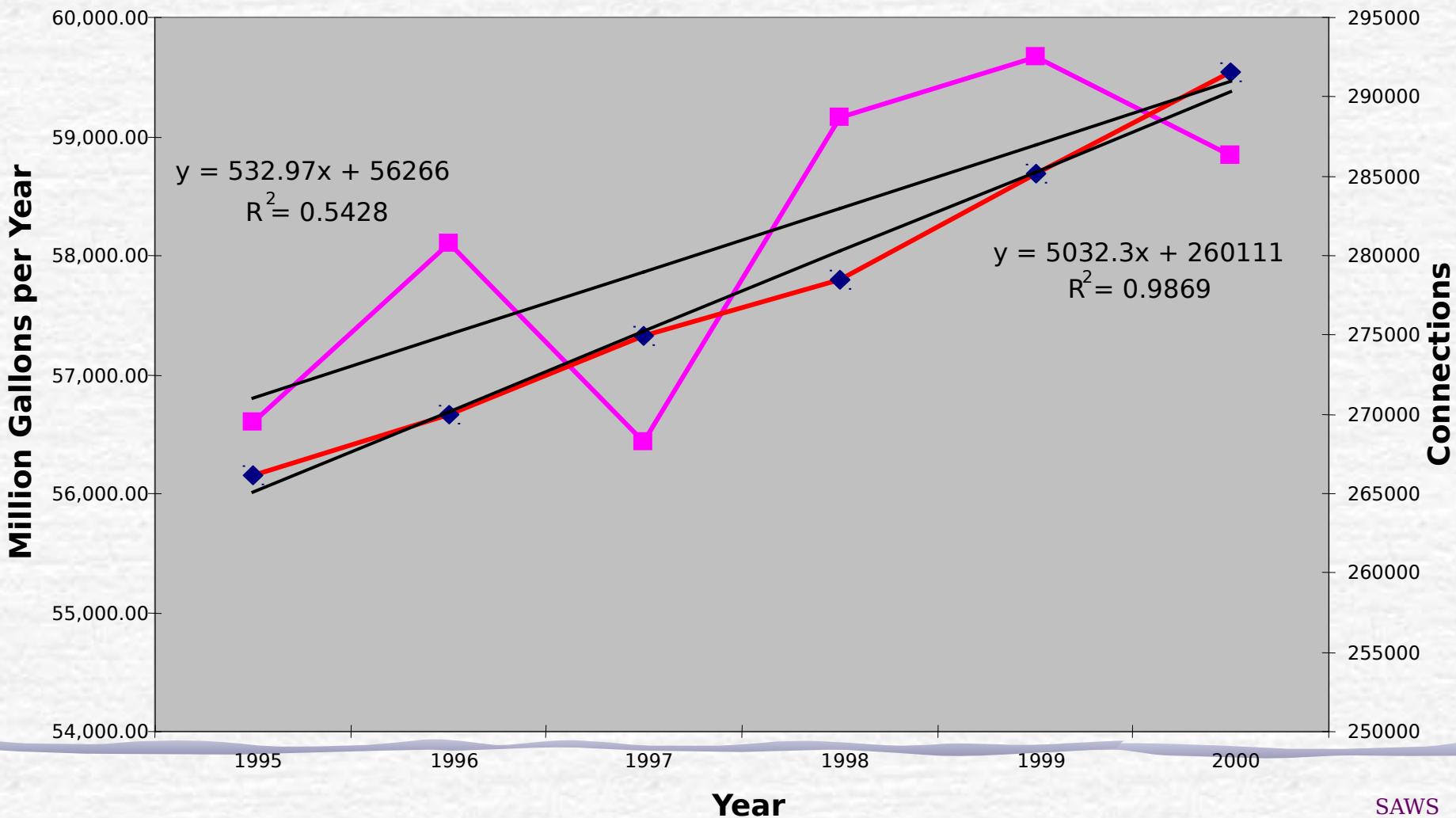
Average Monthly Consumption per Connection (gallons)



Average Daily Pumping



Annual Pumping versus Growth San Antonio Water System



Historical Water Use

GPCD

All EPWU Customers

New goal for 2010: **140 GPCD**

Excess rate
structure & Water
Conservation
Ordinance
adopted

160 GPCD was the goal
set for 2000 back in 1990

2000 goal was achieved, use
by 2001 was 155 GPCD



155

The Basics

Water Accountability Program

- Metering
- System Audit and Leak Detection

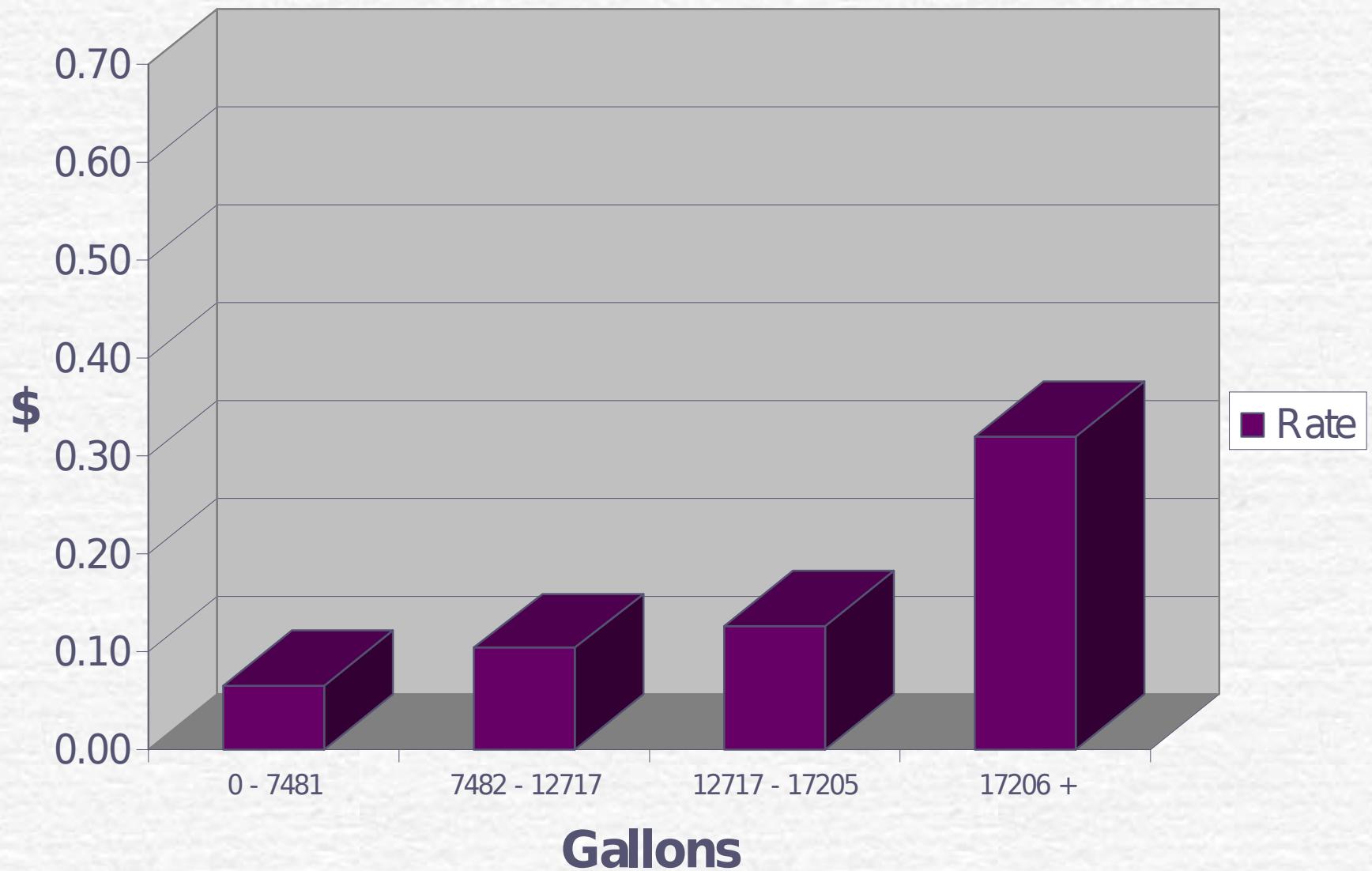
Conservation Pricing

- Increasing Block Rates
- Irrigation Rates

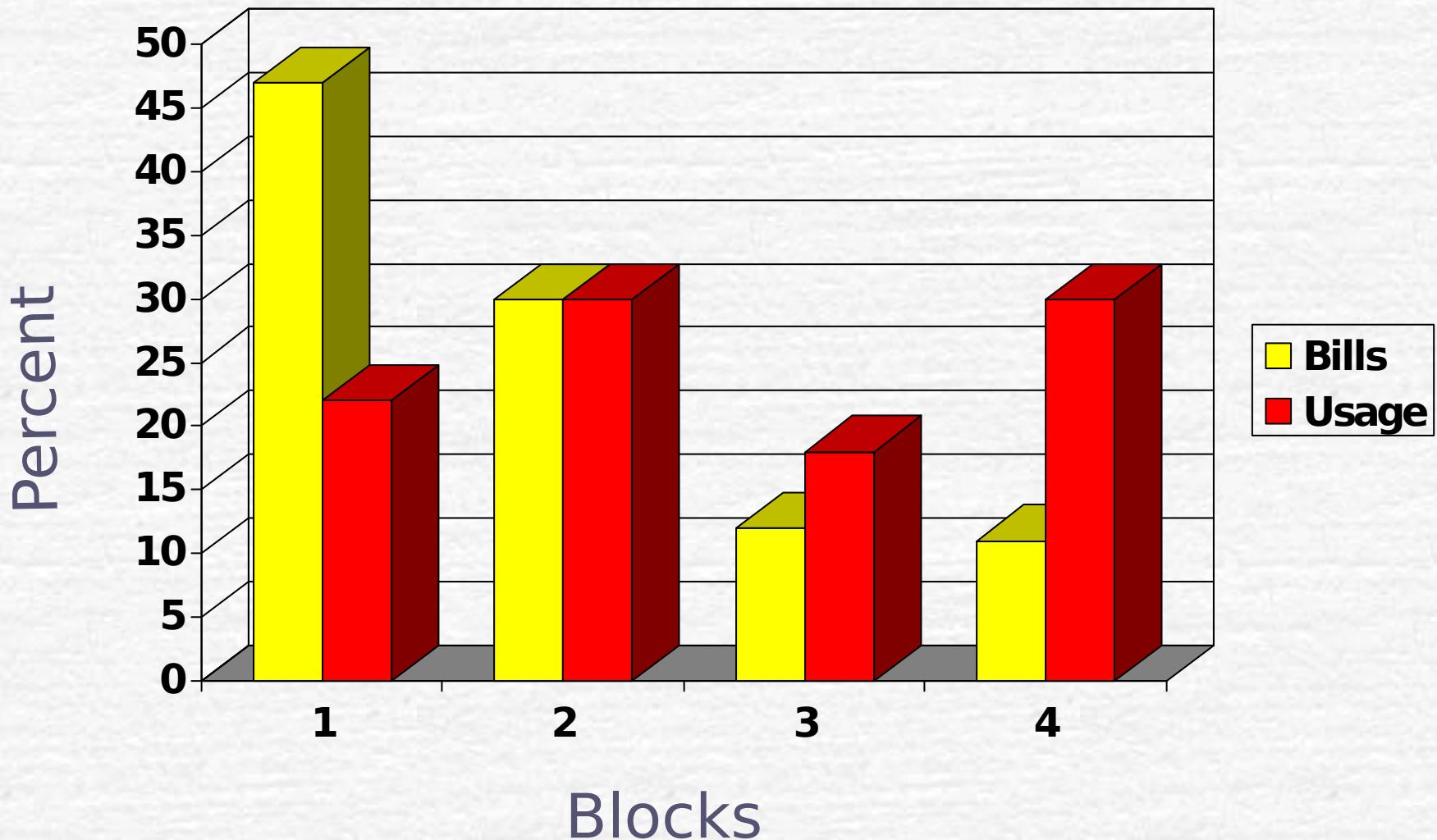
Price

- ☛ Cost/Benefit
- ☛ Avoided costs
- ☛ Rates:
 - Best motivator for outdoor and discretionary water use
 - Inverted blocks or drought surcharges
 - Water budgets

Residential Rate per 100 Gallons



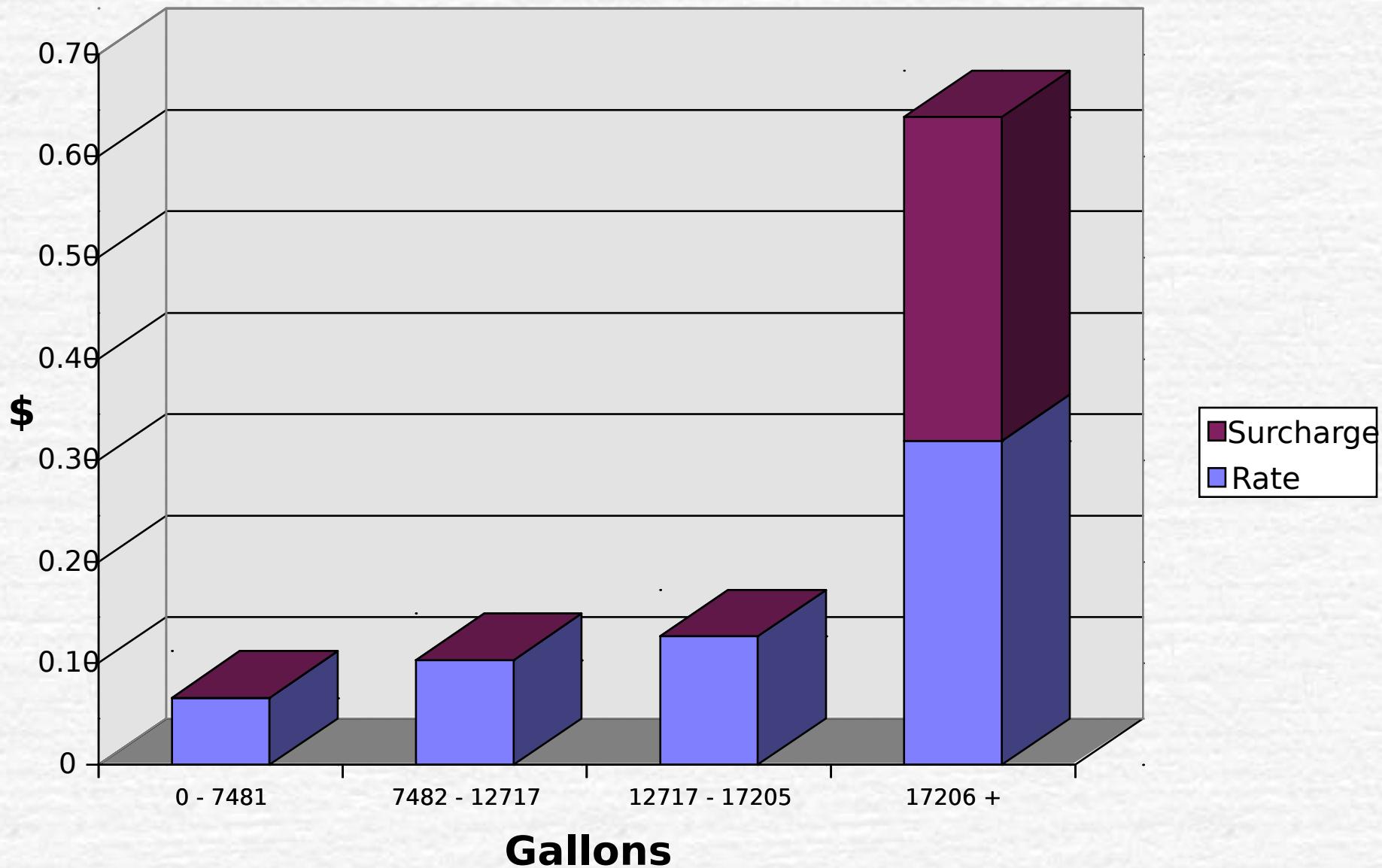
Residential Annual Bills Vs. Usage



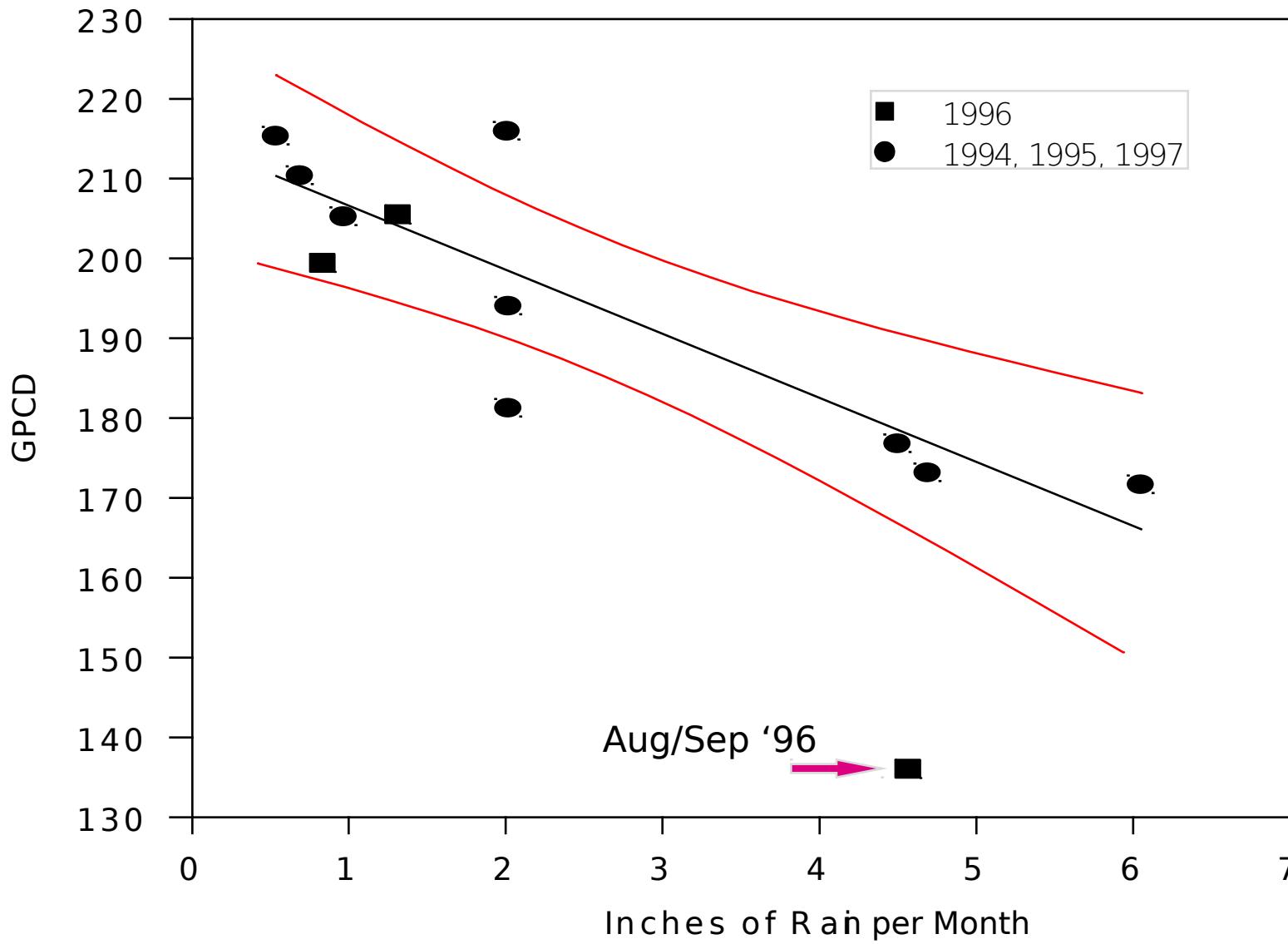
Drought Surcharges

- ↗ Significant percentage increase
- ↗ Only top or excess users
- ↗ Automatic
- ↗ They Work!

Residential Rate per 100 Gallons (with Surcharge)



G P C D vs Rainfall



Drought Surcharge Results

- Rainfall and Critical Period Management most significant
- Best fit: 154 gpcd
- Actual: 136 gpcd
- 271 to 573 million gallons additional conservation above predicted amount.

Best Management Practices (EAA)

Core Municipal

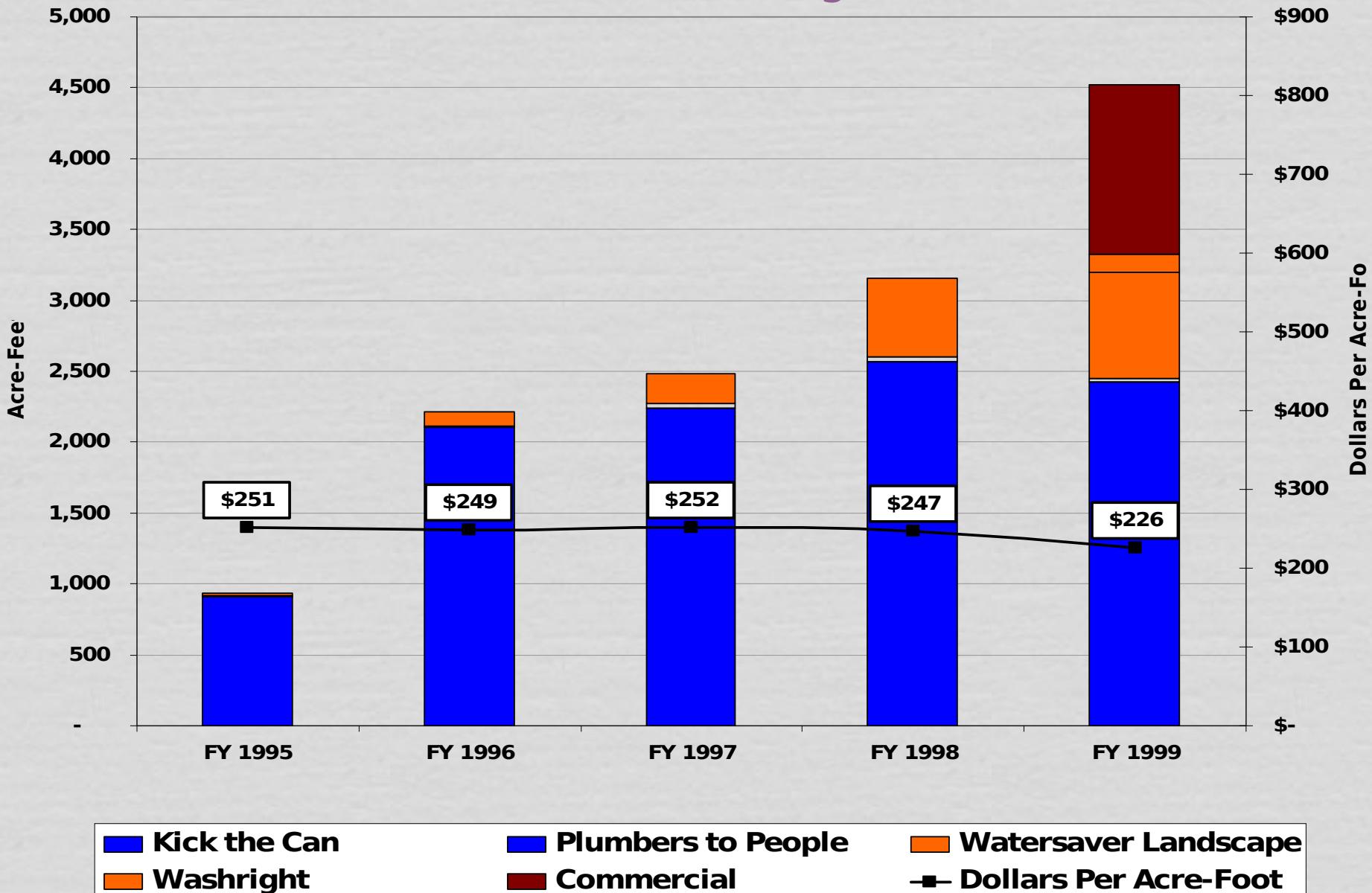
- System Audits, Leak Detection and Repair
- Public Information
- School Education
- Conservation Pricing
- Metering
- Water Waste Prohibition
- Conservation Coordinator

Initiatives with Retail Customers

- Public Education and Information Programs
 - Learning to be Water Wise
 - Project Wet
- Large Landscape Conservation Programs
- Water Survey Program
For Residential Custom



Costs Of Water Saved And Acre Feet Saved Conservation Programs



Conclusion

- ✓ Utility & public cooperation essential
- ✓ Understanding demand = success
- ✓ Conservation is a benefit
- ✓ BMPs help with planning and management of programs

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